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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/783,179

02/20/2004

John S. Wenstrand

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03/07/2006

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EXAMINER

BLOUNT, ERIC

ART UNIT

PAPER NUMBER

2636

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,179

Applicant(s)

WENSTRAND, JOHN S.

Examiner

Eric M. Blount

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,9,11-20 and 23-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4,5,9,11-20 and 23-26 is/are allowed.
- 6) ☒ Claim(s) 27-32 is/are rejected.
- 7) ☒ Claim(s) 4 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see amendment, filed December 16, 2005, with respect to claims 1, 4, 5, 9, 11-20, and 23-26 have been fully considered and are persuasive. The rejections of the claims have been withdrawn in view of the amendments by applicant.
2. Applicant's arguments with respect to claims 27-32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 4 is objected to because of the following informalities: Claim 4, as presented, relies on a cancelled claim (3). Appropriate correction is required.
4. Claim 18 is objected to because of the following informalities: On line 19, applicant includes "a" between the words "said" and "driver". Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breed et al in view Fergason et al in further view of Witt et al. Each reference will be relied upon for teachings as discussed in official action mailed September 16, 2005.

In regard to **claims 27 and 32**, Breed et al disclose a system for a motor vehicle comprising a windshield with at least a portion having a coating, which defines a dichroic mirror that is generally transparent to visible light and substantially reflective with respect to a driver detection wavelength range (column 27, line 35 – column 28, line 23). A detector and processor are provided for determining information regarding a driver of the motor vehicle on the basis of received light (column 28, line 30 – column 29, line 35). Breed discloses the step of accessing data indicative of persons authorized to drive said motorized vehicle and selectively enabling said motorized vehicle on a basis of whether the driver is authorized (column 42, line 38 – column 43, line 33). Breed et al do not specifically show that a detector and processor receive reflected light.

In an analogous art for monitoring the awareness of an individual, Fergason et al disclose a system comprising an optical member with at least a portion having a coating defining a dichroic mirror that is generally transmissive to visible light and substantially reflective with respect to a detection wavelength range (paragraphs 21 and 25). A detector is taught for receiving reflected light within the detection wavelength range following a reflection from the optical member. A processor connected to the detector determines information regarding an individual on the basis of the reflected light received at the detector (paragraphs 25-30). It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to modify the system taught by Breed et al to include the concept of monitoring the awareness of

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an individual through light reflected from the individuals eyes as taught by Ferguson et al because the modification would produce an awareness monitoring system for a motor vehicle which would accurately predict the awareness of a driver. This system would take advantage of the reflectivity of human eyes to monitor awareness and provide an alarm, without obstructing the line-of-sight of the driver.

In another analogous art, Witt et al disclose a system comprising an optical member positioned between a viewer and an environment of interest to the viewer wherein a processor is configured to correlate detection of human eyes to stored identifications of particular persons, enabling the system to specifically identify human eyes (column 4, lines 19-32 and column 5, lines 10-43). It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to modify the inventions of Breed et al and Ferguson et al to include the identification means taught by Witt et al because the combination would result in a system for detecting whether an individual were authorized to drive a vehicle. This might be advantageous in embodiments where several users share equipment and may need to be monitored at any particular time when using any given equipment. Further, since both Breed and Ferguson already monitored the eyes of a driver it would have been a modification that were less expensive than the image capturing means taught by Breed for identifying vehicle drivers.

As for **claims 28-29**, the detector and illuminating components taught by Breed et al can be positioned in the dashboard of the motor vehicle (Figure 1B).

As for **claim 30**, each invention teaches an infrared light source.

Regarding **claims 31**, both Breed and Ferguson teach that the processor is configured to monitor perceived conditions of drowsiness.

Allowable Subject Matter

7. Claims 1, 4, 5, 9, 11-20, and 23-26 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

a. As for **claim 1**, and all claims depending therefrom, the prior art of record fails to sufficiently describe or suggest a system for enabling automatic determinations of information regarding a person engaging in a business transaction comprising an optical member positioned between an intended location of a viewer and an environment of interest to said viewer. The viewer is defined as a person engaging in a business transaction with a second person in the environment of interest and the optical member is a divider that is fixed in position relative to the environment of interest. The system also comprises a detector for receiving reflected light from a viewer that has an output responsive to the received light. A processor processes the detector output to identify information regarding the viewer. These along with other limitations render the claims allowable over the prior art of record.

b. As for **claim 12**, and all claims depending therefrom, the prior art of record fails to properly describe or suggest a system for eye detection comprising a dichroic mirror which reflects light have a specific wavelength range, a first and second light source, and a detector. The first and second light sources emit light to impinge on the dichroic mirror at different illumination angles and the light from both sources are equal with respect to wavelength and have substantially equal intensity within the specific wavelength range.

These along with other limitations render the claims allowable over the prior art of record.

c. As for **claim 18**, and all claims depending therefrom, the prior art of record fails to properly describe or suggest a system for eye detection comprising a dichroic mirror which reflects light in a driver-detection wavelength range, a first and second light source, and a detector. The first and second light sources emit timed pulses of light toward the dichroic mirror for reflection toward a user to illuminate the user's face. The light sources are controlled to provide alternating emissions of first and second light. These along with other limitations render the claims allowable over the prior art of record.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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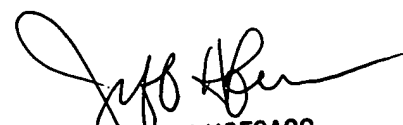
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Blount whose telephone number is (571) 272-2973. The examiner can normally be reached on Monday-Thursday 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric M. Blount
Examiner
Art Unit 2636


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